



# CAIT

Center for Advanced Infrastructure & Transportation  
Rutgers, The State University of New Jersey

NJDOT Bureau of Research  
QUARTERLY PROGRESS REPORT

Project Title:	Development of Airport Obstruction Identification System		
RFP NUMBER:		NJDOT RESEARCH PROJECT MANAGER: Ed Kondrath	
TASK ORDER NUMBER: 115 / 4-26857		PRINCIPAL INVESTIGATOR: Patrick Szary	
Project Starting Date: : 01/1/2002 <b>Original</b> Project Ending Date: 12/31/2003 <b>Modified Completion Date:</b> 12/31/2004		Period Covered: 2 <sup>nd</sup> Quarter 2004	

Task	% of Total	% of Task this quarter	% of Task to date	% of Total Complete
1. Literature Search	10%	0%	100%	10%
2. Develop criteria	5%	0%	100%	5%
3. Evaluate the cost effectiveness	8%	0%	100%	8%
4. Conduct laboratory experiments	5%	0%	80%	4%
5. Conduct laboratory/field experiments	15%	0%	90%	13.5%
6. Develop prototype software	25%	0%	80%	20%
7. Demonstrate field test system	5%	30%	55%	2.75%
8. Redesign a new prototype	5%	10%	90%	4.5%
9. Demonstrate prototype system	5%	10%	40%	2%
10. Train NJDOT personnel	7%	40%	75%	5.25%
11. Final Report	10%	10%	20%	2%
TOTAL	100%			77%

Project Objectives:

Project Abstract:

1. Progress this quarter by task:

- A. The GPS unit was delivered along with the pan and tilt system which was ordered from Remote-I in California.
- B. The Industrial Twin Helicopter has begun to undergo the installation of the components for the system. This work is anticipated to take a few weeks to complete.
- C. The airport selection process was continued to determine a good facility for testing the system once the unit is complete.

2. Proposed activities for next quarter by task:

- A. The completion of the integration of the Bergen Industrial Twin and outfitting the unit with all the necessary components for testing.
- B. Completing the training of DOT personnel with a one-week intensive training session that is to take place.
- C. Test flying the helicopter at the chosen airport and sending acquired images to Oakland University for post processing and producing a detailed map.

3. List of deliverables provided in this quarter by task (product date): n/a

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4. Progress on Implementation and Training Activities:

Trainings sessions were resumed this quarter. Plans are currently being made to conclude the training process.

5. Problems/Proposed Solutions:

The timeframe for the helicopter mount has taken slightly longer than expected and should be completed early next quarter if not by the end of the current quarter. All of the equipment for the helicopter has arrived and is with Chuck Wildey for integration.

Total Project Budget	\$210,000.00
<b>Modified Contract Amount:</b>	
Total Project Expenditure to date	\$111,424
% of Total Project Budget Expended	53%

\* These are approximate expended amounts for the project; these estimates are for reference only and should not be used for official accounting purposes. For a more accurate project accounting please review the quarterly invoice for this project.